Claims:

I. An omni-directional optical code reader comprising:

a lens system;

a first image sensor array for detecting a signal representative of light reflected from an optical code through said lens system, wherein the first image sensor array is disposed approximately at a tilt angle α with respect to the lens system;

a second image sensor array for detecting a signal representative of light reflected from an optical code through said lens system, wherein the second image sensor array is disposed approximately at the tilt angle α with respect to the lens system and oriented in a direction substantially orthogonal to said first image sensor array; and

a first beam splitter to provide a reflected image of the optical code to the first image sensor array and a transmissive image of the optical code to the second image sensor array.

2. An omni-directional optical code reader comprising:

a lens system;

N image sensor arrays for detecting a signal representative of light reflected from an optical code through said lens system, wherein each of said N image sensor arrays is disposed at approximately the same tilt angle α with respect to the lens system, each of said N image sensor arrays oriented in a direction approximately 180/N degrees in relation to one another, N being an integer greater than 1.

3. An omni-directional optical code reader comprising:

a lens system having an optical axis;

an image sensor array for generating a pattern of analog signal lines representative of light reflected from an optical code through said lens system, wherein the image sensor array is disposed at a tilt angle α with respect to the optical axis of the lens system and wherein the image sensor array is rotatable about the optical axis while maintaining the tilt angle α to produce an omni-directional sample-scan line pattern.

4. The omni-directional optical code reader of claim 3, wherein rotation of the image sensor array is synchronized with a timing cycle of raster scan line reading of the image sensor array.

5. An omni-directional optical code reader comprising: a lens system;

an image sensor array for detecting a signal representative of light reflected from an optical code through said lens system, wherein the image sensor array is disposed at a tilt angle α with respect to the lens system; and

an optical device for rotating the image of the optical code.

6. The omni-directional optical code reader of claim 5, wherein rotation of the image of the optical code is synchronized with a timing cycle of raster scan line reading of the image sensor array.

7. The omni-directional optical code reader of claim 5 wherein the optical device is a dove prism.

8. The omni-directional optical code reader of claim 5, wherein the optical device is a mirror assembly.

9. An omni-directional optical code reader comprising:

a first lens system;

a first image sensor array for detecting a signal representative of light reflected from an optical code through said first lens system, wherein the first image sensor array is disposed approximately at a tilt angle α with respect to the first lens system;

a second lens system;

a second image sensor array for detecting a signal representative of light reflected from an optical code through said second lens system, wherein the second image sensor array is disposed approximately at the tilt angle with respect to the second lens system and oriented in a direction substantially orthogonal to said first image sensor array; and

a beam splitter to provide a reflected image of the optical code to the first lens system and image sensor array and a transmissive image of the optical code to the second lens system and image sensor array.